

PERAC AUDIT REPORT



Medford Contributory Retirement System

JAN. 1, 2012 - DEC. 31, 2015



TABLE OF CONTENTS

Letter from the Executive Director	I
Explanation of Findings and Recommendations.....	2
Statement of Ledger Assets and Liabilities.....	3
Statement of Changes in Fund Balances	4
Statement of Receipts.....	5
Statement of Disbursements.....	6
Investment Income.....	7
Schedule of Allocation of Investments Owned.....	8
Supplementary Investment Regulations.....	9
Notes to Financial Statements:	
Note 1 - Summary of Plan Provisions	11
Note 2 - Significant Accounting Policies.....	18
Note 3 - Supplementary Membership Regulations.....	20
Note 4 - Administration of the System	22
Note 5 - Actuarial Valuation and Assumptions.....	23
Note 6 - Membership Exhibit.....	24

PERAC

COMMONWEALTH OF MASSACHUSETTS | PUBLIC EMPLOYEE RETIREMENT ADMINISTRATION COMMISSION

PHILIP Y. BROWN, ESQ., *Chairman*

JOSEPH E. CONNARTON, *Executive Director*

Auditor SUZANNE M. BUMP | KATHLEEN M. FALLON | KATE FITZPATRICK | JAMES M. MACHADO | ROBERT B. MCCARTHY | JENNIFER F. SULLIVAN

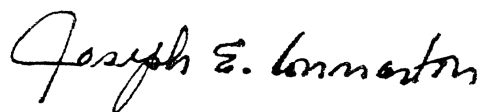
September 5, 2018

The Public Employee Retirement Administration Commission has completed an examination of the Medford Retirement System pursuant to G.L. c. 32, § 21. The examination covered the period from January 1, 2012 to December 31, 2015. This audit was conducted in accordance with the accounting and management standards established by the Public Employee Retirement Administration Commission in regulation 840 CMR 25.00. Additionally, all supplementary regulations approved by PERAC and on file at PERAC are listed in this report.

In our opinion, the financial records are being maintained and the management functions are being performed in conformity with the standards established by the Public Employee Retirement Administration Commission with the exception of those noted in the findings presented in this report.

In closing, I acknowledge the work of examiners George Nsia, Walter Kloc, and Michael Nicolazzo who conducted this examination, and express appreciation to the Board of Retirement and staff for their courtesy and cooperation.

Sincerely,



Joseph E. Connarton
Executive Director



EXPLANATION OF FINDINGS AND RECOMMENDATIONS

1. Bank Reconciliations:

The Board has two checking accounts, one at Bank of America for the retiree payroll and one at Century Bank for operating expenses. The bank reconciliations as of September 30, 2017 contain a significant number of checks that had been outstanding for more than six months. The stale outstanding checks on the Bank of America reconciliation totaled approximately \$20,000 and date back to January 2012. The Century Bank reconciliation had two stale outstanding checks totaling approximately \$300 and date back to March 2010.

Recommendation: The Medford Retirement Board should review and resolve the checks that have been outstanding for more than six months.

Board Response:

The outstanding checks mentioned will be booked into accounts payable, voided, researched and resolved. The system will review all outstanding checks on a monthly basis. Checks that are found to be outstanding for more than six months will be voided, researched and resolved on a case by case basis.

2. Investment Management Fees:

We noted that there were no fees recorded in the General Ledger (GL) account #5304 Management Fees for four of the Board's managers: Standard Life Investments, William Blair Macro Allocation Funds, Loomis Sayles Small Cap Funds and Lazard International Strategic Funds. Furthermore, two of these managers, Standard Life Investments and William Blair Macro Allocation Funds, were not listed on Schedule 7 of the 2015 Annual Statements. The other two managers, Loomis Sayles Small Cap Funds and Lazard International Strategic Funds, were listed on Schedule 7 but the management fees were not included, as they were recorded 'net' of income in the GL.

Recommendation: The Medford Retirement System should review the accounting of investments in detail to ensure that all management fees are properly recorded in the GL. The Retirement System should not "net" management fees for accounting purposes, but should record gross income and management fees for each investment. In addition, Schedule 7 should include all investments.

Board Response:

The System's investment consultant has been contacted and is working directly with the managers to calculate the report management fees to the System on a quarterly basis beginning FY2018. For FY2017, the fees have been reported on an annual basis. All management fees will be booked to account # 5304 and included on Schedule 7.

FINAL DETERMINATION:

PERAC Audit staff will follow up in six (6) months to ensure appropriate actions have been taken regarding all findings.

STATEMENT OF LEDGER ASSETS AND LIABILITIES

	AS OF DECEMBER 31,			
	2015	2014	2013	2012
Net Assets Available For Benefits:				
Cash	\$10,346,267	\$3,965,541	\$2,861,479	\$4,495,611
Fixed Income Securities	17,832,974	17,840,587	16,889,308	18,363,173
Equities	5,627	16,496	18,234	12,135
Pooled Domestic Equity Funds	25,185,205	27,157,637	26,626,939	24,964,082
Pooled International Equity Funds	24,726,150	26,395,063	24,664,695	19,454,437
Pooled Domestic Fixed Income Funds	14,349,551	32,873,318	32,538,673	30,973,695
Pooled Alternative Investment Funds	10,610,236	9,895,906	8,806,567	7,015,324
Pooled Real Estate Funds	10,288,373	10,452,334	9,175,148	8,325,489
Pooled International Balanced Funds	46,470,658	32,230,753	33,953,556	30,416,187
Hedge Funds	14,348,318	14,620,244	13,846,260	12,303,310
Interest Due and Accrued	97,308	66,880	107,086	116,043
Accounts Receivable	424,847	0	363,218	0
Accounts Payable	(4,275,511)	(1,829,326)	(1,896,468)	(1,284,438)
Total	\$170,410,001	\$173,685,432	\$167,954,695	\$155,155,048
Fund Balances:				
Annuity Savings Fund	\$46,623,022	\$45,634,628	\$43,869,520	\$41,576,751
Annuity Reserve Fund	11,490,310	11,355,811	11,432,283	12,223,854
Pension Fund	3,348,601	196,720	4,303,244	3,307,545
Military Service Fund	4,835	15,206	15,189	15,171
Expense Fund	0	0	0	0
Pension Reserve Fund	108,943,232	116,483,067	108,334,460	98,031,727
Total	\$170,410,001	\$173,685,432	\$167,954,695	\$155,155,048

STATEMENT OF CHANGES IN FUND BALANCES

	Annuity Savings Fund	Annuity Reserve Fund	Pension Fund	Military Service Fund	Expense Fund	Pension Reserve Fund	Total All Funds
Beginning Balance (2012)	\$40,276,555	\$12,276,566	\$0	\$15,153	\$0	\$90,044,212	\$142,612,486
Receipts	3,371,101	366,416	9,400,622	18	1,213,968	15,770,230	30,122,354
Interfund Transfers	(1,714,441)	1,715,264	7,781,891	0	0	(7,782,715)	0
Disbursements	<u>(356,464)</u>	<u>(2,134,392)</u>	<u>(13,874,968)</u>	<u>0</u>	<u>(1,213,968)</u>	<u>0</u>	<u>(17,579,792)</u>
Ending Balance (2012)	41,576,751	12,223,854	3,307,545	15,171	0	98,031,727	155,155,048
Receipts	3,819,461	351,987	9,856,994	18	1,312,484	15,533,070	30,874,014
Interfund Transfers	(1,105,734)	1,113,057	5,223,014	0	0	(5,230,337)	0
Disbursements	<u>(420,959)</u>	<u>(2,256,615)</u>	<u>(14,084,309)</u>	<u>0</u>	<u>(1,312,484)</u>	<u>0</u>	<u>(18,074,367)</u>
Ending Balance (2013)	43,869,520	11,432,283	4,303,243	15,189	0	108,334,460	167,954,695
Receipts	4,062,241	340,299	10,300,392	18	1,231,863	8,148,482	24,083,295
Interfund Transfers	(1,822,721)	1,826,573	(3,978)	0	0	126	(0)
Disbursements	<u>(474,413)</u>	<u>(2,243,344)</u>	<u>(14,402,937)</u>	<u>0</u>	<u>(1,231,863)</u>	<u>0</u>	<u>(18,352,557)</u>
Ending Balance (2014)	45,634,628	11,355,811	196,720	15,206	0	116,483,067	173,685,432
Receipts	3,868,078	347,664	10,692,530	12	1,264,805	(168,622)	16,004,467
Interfund Transfers	(2,390,493)	2,394,900	7,377,189	(10,383)	0	(7,371,214)	0
Disbursements	<u>(489,190)</u>	<u>(2,608,065)</u>	<u>(14,917,838)</u>	<u>0</u>	<u>(1,264,805)</u>	<u>0</u>	<u>(19,279,899)</u>
Ending Balance (2015)	<u>\$46,623,022</u>	<u>\$11,490,310</u>	<u>\$3,348,601</u>	<u>\$4,835</u>	<u>\$0</u>	<u>\$108,943,232</u>	<u>\$170,410,001</u>

STATEMENT OF RECEIPTS

FOR THE PERIOD ENDING DECEMBER 31,				
	2015	2014	2013	2012
Annuity Savings Fund:				
Members Deductions	\$3,656,503	\$3,594,103	\$3,413,482	\$3,216,237
Transfers from Other Systems	93,963	359,112	283,703	93,626
Member Make Up Payments and Re-deposits	66,491	65,740	79,063	19,087
Investment Income Credited to Member Accounts	<u>51,121</u>	<u>43,286</u>	<u>43,213</u>	<u>42,152</u>
Sub Total	<u>3,868,078</u>	<u>4,062,241</u>	<u>3,819,461</u>	<u>3,371,101</u>
Annuity Reserve Fund:				
Investment Income Credited to the Annuity Reserve Fund	<u>347,664</u>	<u>340,299</u>	<u>351,987</u>	<u>366,416</u>
Pension Fund:				
3 (8) (c) Reimbursements from Other Systems Received from Commonwealth for COLA and Survivor Benefits	150,189	135,778	137,585	128,930
Pension Fund Appropriation	25,571	142,978	304,679	509,357
Settlement of Workers' Compensation Claims	10,500,018	10,011,299	9,401,470	8,755,463
Recovery of 91A Overearnings	11,600	8,000	13,260	6,872
	<u>5,152</u>	<u>2,337</u>	<u>0</u>	<u>0</u>
Sub Total	<u>10,692,530</u>	<u>10,300,392</u>	<u>9,856,994</u>	<u>9,400,622</u>
Military Service Fund:				
Investment Income Credited to the Military Service Fund	<u>12</u>	<u>18</u>	<u>18</u>	<u>18</u>
Expense Fund:				
Investment Income Credited to the Expense Fund	<u>1,264,805</u>	<u>1,231,863</u>	<u>1,312,484</u>	<u>1,213,968</u>
Pension Reserve Fund:				
Federal Grant Reimbursement	21,023	63,499	58,933	35,247
Miscellaneous Income	415	0	0	0
Excess Investment Income / (Loss)	(190,060)	8,084,983	15,474,137	15,734,983
Sub Total	<u>(168,622)</u>	<u>8,148,482</u>	<u>15,533,070</u>	<u>15,770,230</u>
Total Receipts, Net	<u>\$16,004,467</u>	<u>\$24,083,295</u>	<u>\$30,874,014</u>	<u>\$30,122,354</u>

STATEMENT OF DISBURSEMENTS

FOR THE PERIOD ENDING DECEMBER 31,				
	2015	2014	2013	2012
Annuity Savings Fund:				
Refunds to Members	\$207,347	\$172,800	\$162,339	\$167,820
Transfers to Other Systems	<u>281,844</u>	<u>301,613</u>	<u>258,619</u>	<u>188,645</u>
Sub Total	<u>489,190</u>	<u>474,413</u>	<u>420,959</u>	<u>356,464</u>
Annuity Reserve Fund:				
Annuities Paid	2,358,461	2,218,276	2,145,900	2,100,529
Option B Refunds	<u>249,604</u>	<u>25,068</u>	<u>110,714</u>	<u>33,863</u>
Sub Total	<u>2,608,065</u>	<u>2,243,344</u>	<u>2,256,615</u>	<u>2,134,392</u>
Pension Fund:				
Pensions Paid:				
Regular Pension Payments	8,176,167	7,920,881	7,857,845	7,828,960
Survivorship Payments	845,833	805,779	801,333	753,177
Ordinary Disability Payments	186,866	160,585	148,279	157,141
Accidental Disability Payments	3,966,091	3,805,688	3,632,436	3,530,433
Accidental Death Payments	1,004,991	1,006,988	966,898	1,029,768
Section 101 Benefits	157,357	144,653	108,571	118,550
3 (8) (c) Reimbursements to Other Systems	467,988	446,595	455,505	349,346
State Reimbursable COLA's Paid	<u>112,545</u>	<u>111,769</u>	<u>113,442</u>	<u>107,594</u>
Sub Total	<u>14,917,838</u>	<u>14,402,937</u>	<u>14,084,309</u>	<u>13,874,968</u>
Expense Fund:				
Board Member Stipend	20,700	25,200	25,200	23,825
Salaries	164,805	171,270	162,165	170,435
Legal Expenses	11,074	9,495	10,126	9,673
Medical Expenses	114	146	61	0
Travel Expenses	5,575	3,945	2,683	4,476
Administrative Expenses	15,455	15,780	17,977	14,790
Actuarial Services	625	5,000	9,500	0
Education and Training	2,100	2,100	1,350	2,100
Furniture and Equipment	0	3,807	600	1,820
Management Fees	881,975	827,154	933,360	833,851
Custodial Fees	59,050	65,523	56,771	43,379
Consultant Fees	67,633	67,097	66,105	81,250
Service Contracts	23,938	23,902	15,686	17,485
Fiduciary Insurance	<u>11,761</u>	<u>11,445</u>	<u>10,899</u>	<u>10,884</u>
Sub Total	<u>1,264,805</u>	<u>1,231,863</u>	<u>1,312,484</u>	<u>1,213,968</u>
Total Disbursements	<u>\$19,279,899</u>	<u>\$18,352,557</u>	<u>\$18,074,367</u>	<u>\$17,579,792</u>

INVESTMENT INCOME

FOR THE PERIOD ENDING DECEMBER 31,				
	2015	2014	2013	2012
Investment Income Received From:				
Cash	\$7,150	\$541	\$706	\$3,775
Fixed Income	592,504	3,208,048	2,340,275	785,695
Equities	9,256	9,733	5,769	3,969
Pooled or Mutual Funds	3,279,369	1,479,805	1,330,822	2,185,424
Commission Recapture	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Investment Income	<u>3,888,279</u>	<u>4,698,127</u>	<u>3,677,572</u>	<u>2,978,863</u>
Plus:				
Realized Gains	6,758,511	4,390,831	3,219,232	916,264
Unrealized Gains	16,862,478	19,038,338	23,217,821	23,299,075
Interest Due and Accrued - Current Year	<u>97,308</u>	<u>66,880</u>	<u>107,086</u>	<u>116,043</u>
Sub Total	<u>23,718,297</u>	<u>23,496,049</u>	<u>26,544,138</u>	<u>24,331,382</u>
Less:				
Paid Accrued Interest on Fixed Income Securities	(115,552)	(85,608)	(47,794)	(28,046)
Realized Loss	(310,122)	(462,500)	(476,797)	(134,578)
Unrealized Loss	(25,640,479)	(17,838,533)	(12,399,237)	(9,658,456)
Interest Due and Accrued - Prior Year	<u>(66,880)</u>	<u>(107,086)</u>	<u>(116,043)</u>	<u>(131,630)</u>
Sub Total	<u>(26,133,033)</u>	<u>(18,493,727)</u>	<u>(13,039,871)</u>	<u>(9,952,710)</u>
Net Investment Income	<u>1,473,543</u>	<u>9,700,449</u>	<u>17,181,839</u>	<u>17,357,536</u>
Income Required:				
Annuity Savings Fund	51,121	43,286	43,213	42,152
Annuity Reserve Fund	347,664	340,299	351,987	366,416
Military Service Fund	12	18	18	18
Expense Fund	<u>1,264,805</u>	<u>1,231,863</u>	<u>1,312,484</u>	<u>1,213,968</u>
Total Income Required	<u>1,663,603</u>	<u>1,615,466</u>	<u>1,707,702</u>	<u>1,622,553</u>
Net Investment Income	<u>1,473,543</u>	<u>9,700,449</u>	<u>17,181,839</u>	<u>17,357,536</u>
Less: Total Income Required	<u>1,663,603</u>	<u>1,615,466</u>	<u>1,707,702</u>	<u>1,622,553</u>
Excess Income (Loss) To The Pension Reserve Fund	<u>(\$190,060)</u>	<u>\$8,084,983</u>	<u>\$15,474,137</u>	<u>\$15,734,983</u>

SCHEDULE OF ALLOCATION OF INVESTMENTS OWNED

(percentages by category)

AS OF DECEMBER 31, 2015		
	MARKET VALUE	PERCENTAGE OF TOTAL ASSETS
Cash	\$10,346,267	5.9%
Fixed Income Securities	17,832,974	10.2%
Equities	5,627	0.0%
Pooled Domestic Equity Funds	25,185,205	14.5%
Pooled International Equity Funds	24,726,150	14.2%
Pooled Domestic Fixed Income Funds	14,349,551	8.2%
Pooled Alternative Investment Funds	10,610,236	6.1%
Pooled Real Estate Funds	10,288,373	5.9%
Pooled International Balanced Funds	46,470,658	26.7%
Hedge Funds	<u>14,348,318</u>	<u>8.2%</u>
Grand Total	<u>\$174,163,358</u>	<u>100.0%</u>

For the year ending December 31, 2015, the rate of return for the investments of the Medford Retirement System was 0.46%. For the five-year period ending December 31, 2015, the rate of return for the investments of the Medford Retirement System averaged 6.20%. For the 31-year period ending December 31, 2015, since PERAC began evaluating the returns of the retirement systems, the rate of return on the investments of the Medford Retirement System was 8.80%.

The composite rate of return for all retirement systems for the year ending December 31, 2015 was 0.91%. For the five-year period ending December 31, 2015, the composite rate of return for the investments of all retirement systems averaged 7.49%. For the 31-year period ending December 31, 2015, since PERAC began evaluating the returns of the retirement systems, the composite rate of return on the investments of all retirement systems averaged 9.14%.

SUPPLEMENTARY INVESTMENT REGULATIONS

The Medford Retirement System submitted the following supplementary investment regulations, which were approved by the Public Employee Retirement Administration Commission on:

December 4, 2011

The MRB may forego the normal procurement process for an investment related service (840 CMR 16.08) and transfer assets from the Mellon Capital Management EB Daily Valued Global Alpha I Fund into the Mellon Capital Management EB Daily Valued Expanded Alpha I Fund.

June 5, 2007

Regulation Number 21.01(2): State Street Global Advisors is authorized to “short sell” securities up to 30% of the market value of the fund. This exemption from 840 CMR 21.01(2) allows the manager to pursue the 130/30 strategy that comprises its Index Plus Edge Strategy.

March 5, 2007

Regulation Number 17.03: Notwithstanding the provisions of the Public Employee Retirement Administration Commission regulations, the Medford Retirement Board may invest funds of the Retirement System (the “System”) in the fund known as the Institutional Retirement Trust (IRT) International Equity Trust (the “Fund”), and effective as of the date of the initial investment by the System of any of its assets in the Fund, while the assets of the System are so invested, the activities and investments of the Fund, directly or indirectly, shall be deemed to satisfy the prohibited transaction rules set forth in 840 CMR 16.00 et seq. and 840 CMR 17.03 to the extent such activities satisfy the prohibited transaction rules set forth in Section 406 of the U.S. Employee Retirement Income Security Act of 1974, as amended (“ERISA”), taking into account ERISA Section 408(b)(8) as well as other statutory exemptions under ERISA, and Prohibited Transaction Class Exemption 84-14, as amended, Prohibited Transaction Class Exemption 91-38, and other available class exemptions.

September 26, 2006

Regulation Number 21.01(2) (3): In order to expand the range of investment opportunities and to better manage risk, Wellington Management Company’s Opportunistic Investment Approach is authorized to utilize long and short positions in certain derivative instruments. These positions would be used to implement pair-wise relative value trades involving various asset classes and subclasses, regions, currencies, and other market segments. The instruments used will be highly liquid, no net leverage will be employed, and there will be no individual stocks sold short. The notational value of such instruments will be limited to 15% of the total market value of the portfolio.

Regulation Number 21.01(2) (3) (4) (5): The PIMCO All Asset Fund seeks to achieve real rates of return by opportunistically investing in a broad range of SEC-regulated PIMCO mutual funds. In addition to funds that invest in short and long-term investment grade bonds, high yield bonds, global bonds, emerging market bonds, Treasury Inflation-Protected Securities, real estate securities, domestic and international stocks, the Fund may invest in the PIMCO Commodity Real Return Strategy Fund. Also, all the funds are permitted to achieve exposure to their respective markets by the use of derivative instruments, including options, futures, options on futures, and swaps. This strategy allows the funds to seek incremental returns by investing the available cash in short and

SUPPLEMENTARY INVESTMENT REGULATIONS (Continued)

intermediate-term fixed income instruments. Although not a fundamental part of the funds' strategies, the underlying funds are permitted to execute short sales.

Regulation Number 21.01(2)(3)(4)(5): Mellon Capital Global Alpha I seeks to produce absolute returns by entering into long and/or short asset positions in any of the countries and/or asset classes in the MSCI World and Citigroup WGBI Indices, or in the currencies of these countries. The fund takes positions in the stock and bond markets of the ten largest developed countries and eleven major currencies. It takes positions only in equity index funds and government bonds in the various countries. Utilizing long and/or short positions in these markets, the fund may make relative value bets within and among the stock markets, bond markets, or currencies of the major developed country markets. There will be no net short positions in the major asset classes and no leverage is employed. Market exposures may be achieved through the use of derivative contracts, all of which are expected to be fully collateralized, exchange-traded, and independently priced.

March 13, 2002

Regulation Number 16.08: In accordance with Investment Guideline 99-2, the Medford Retirement Board is authorized to modify its small cap value mandate with Loomis, Sayles & Company. The Small Company Value Fund in which the Board is currently invested is being closed and liquidated by the company. The Board's assets invested in that fund will be transferred into the Loomis Sayles Small Cap Value Fund, which has the same investment strategy, is managed by the same team, and has the same expenses as the prior fund.

NOTES TO FINANCIAL STATEMENTS

NOTE 1 – SUMMARY OF PLAN PROVISIONS

The plan is a contributory defined benefit plan covering all Medford Retirement System member unit employees deemed eligible by the retirement board, with the exception of school department employees who serve in a teaching capacity. The Teachers' Retirement Board administers the pensions of such school employees.

ADMINISTRATION

There are 104 contributory retirement systems for public employees in Massachusetts. Each system is governed by a retirement board and all boards, although operating independently, are governed by Chapter 32 of the Massachusetts General Laws. This law in general provides uniform benefits, uniform contribution requirements and a uniform accounting and funds structure for all systems.

PARTICIPATION

Participation is mandatory for all full-time employees. Eligibility with respect to part-time, provisional, temporary, seasonal or intermittent employment is governed by regulations promulgated by the retirement board, and approved by PERAC. Membership is optional for certain elected officials.

There are 4 classes of membership in the retirement system, but one of these classes, Group 3, is made up exclusively of the State Police. The other 3 classes are as follows:

Group 1:

General employees, including clerical, administrative, technical and all other employees not otherwise classified.

Group 2:

Certain specified hazardous duty positions.

Group 4:

Police officers, firefighters, and other specified hazardous positions.

NOTES TO FINANCIAL STATEMENTS (Continued)

MEMBER CONTRIBUTIONS

Member contributions vary depending on the most recent date of membership:

Prior to 1975:	5% of regular compensation
1975 - 1983:	7% of regular compensation
1984 to 6/30/96:	8% of regular compensation
7/1/96 to present:	9% of regular compensation
1979 to present:	an additional 2% of regular compensation in excess of \$30,000.

In addition, members of Group 1 who join the system on or after April 2, 2012 will have their withholding rate reduced to 6% after achieving 30 years of creditable service.

RATE OF INTEREST

Interest on regular deductions made after January 1, 1984 is a rate established by PERAC in consultation with the Commissioner of Banks. The rate is obtained from the average rates paid on individual savings accounts by a representative sample of at least 10 financial institutions.

RETIREMENT AGE

The mandatory retirement age for some Group 2 and Group 4 employees is age 65. Most Group 2 and Group 4 members may remain in service after reaching age 65. Group 4 members who are employed in certain public safety positions are required to retire at age 65. There is no mandatory retirement age for employees in Group 1.

SUPERANNUATION RETIREMENT

A person who became a member before April 2, 2012 is eligible for a superannuation retirement allowance (service retirement) upon meeting the following conditions:

- completion of 20 years of service, or
- attainment of age 55 if hired prior to 1978, or if classified in Group 4, or
- attainment of age 55 with 10 years of service, if hired after 1978, and if classified in Group 1 or 2.

A person who became a member on or after April 2, 2012 is eligible for a superannuation retirement allowance (service retirement) upon meeting the following conditions:

- attainment of age 60 with 10 years of service if classified in Group 1, or
- attainment of age 55 with 10 years of service if classified in Group 2, or
- attainment of age 55 if classified in Group 4.

NOTES TO FINANCIAL STATEMENTS (Continued)

AMOUNT OF BENEFIT

A member's annual allowance is determined by multiplying average salary by a benefit rate related to the member's age and job classification at retirement, and the resulting product by his creditable service. The amount determined by the benefit formula cannot exceed 80% of the member's highest three year (or five year as discussed below) average salary. For veterans as defined in G.L. c. 32, s. 1, there is an additional benefit of \$15 per year for each year of creditable service, up to a maximum of \$300.

For employees who become members after January 1, 2011, regular compensation is limited to 64% of the federal limit found in 26 U.S.C. 401(a)(17). In addition, regular compensation will be limited to prohibit "spiking" of a member's salary to increase the retirement benefit.

- For persons who became members prior to April 2, 2012, Average Salary is the average annual rate of regular compensation received during the 3 consecutive years that produce the highest average, or, if greater, during the last 3 years (whether or not consecutive) preceding retirement.
- For persons who became members on or after April 2, 2012, Average Salary is the average annual rate of regular compensation received during the 5 consecutive years that produce the highest average, or, if greater, during the last 5 years (whether or not consecutive) preceding retirement.
- The Benefit Rate varies with the member's retirement age. For persons who became members prior to April 2, 2012 the highest rate of 2.5% applies to Group 1 employees who retire at or after age 65, Group 2 employees who retire at or after age 60, and to Group 4 employees who retire at or after age 55. A .1% reduction is applied for each year of age under the maximum age for the member's group. For Group 2 employees who terminate from service under age 55, the benefit rate for a Group 1 employee shall be used.
- For persons who became members on or after April 2, 2012 and retire with less than 30 years of creditable service, the highest rate of 2.5% applies to Group 1 employees who retire at or after age 67, Group 2 employees who retire at or after age 62, and to Group 4 employees who retire at or after age 57. A .15% reduction is applied for each year of age under the maximum age for the member's group.
- For persons who became members on or after April 2, 2012 and retire with more than 30 years of creditable service, the highest rate of 2.5% applies to Group 1 employees who retire at or after age 67, Group 2 employees who retire at or after age 62, and to Group 4 employees who retire at or after age 57. A .125% reduction is applied for each year of age under the maximum age for the member's group.

DEFERRED VESTED BENEFIT

A participant who has attained the requisite years of creditable service can elect to defer his or her retirement until a later date. Certain public safety employees cannot defer beyond age 65. All participants must begin to receive a retirement allowance or withdraw their accumulated deductions no later than April 15 of the calendar year following the year they reach age 70½.

NOTES TO FINANCIAL STATEMENTS (Continued)

WITHDRAWAL OF CONTRIBUTIONS

Member contributions may be withdrawn upon termination of employment. The interest rate for employees who first become members on or after January 1, 1984 who voluntarily withdraw their contributions with less than 10 years of service will be 3%. Interest payable on all other withdrawals will be set at regular interest.

DISABILITY RETIREMENT

The Massachusetts Retirement Plan provides 2 types of disability retirement benefits:

ORDINARY DISABILITY

Eligibility: Non-veterans who become totally and permanently disabled by reason of a non-job related condition with at least 10 years of creditable service (or 15 years creditable service in systems in which the local option contained in G.L. c. 32, s. 6(1) has not been adopted).

Veterans with ten years of creditable service who become totally and permanently disabled by reason of a non-job related condition prior to reaching “maximum age”. “Maximum age” applies only to those employees classified in Group 4 who are subject to mandatory retirement.

Retirement Allowance: For persons who became members prior to April 2, 2012, the benefit is equal to the accrued superannuation retirement benefit as if the member was age 55. If the member is a veteran, the benefit is 50% of the member’s final rate of salary during the preceding 12 months, plus an annuity based upon accumulated member contributions plus credited interest. If the member is over age 55, he or she will receive not less than the superannuation allowance to which he or she is entitled.

For persons in Group 1 who became members on or after April 2, 2012, the benefit is equal to the accrued superannuation retirement benefit as if the member was age 60. If the member is a veteran, the benefit is 50% of the member’s final rate of salary during the preceding 12 months, plus an annuity based upon accumulated member contributions plus credited interest. If the member is over age 60, he or she will receive not less than the superannuation allowance to which he or she would have been entitled had they retired for superannuation.

For persons in Group 2 and Group 4 who became members on or after April 2, 2012, the benefit is equal to the accrued superannuation retirement benefit as if the member was age 55. If the member is a veteran, the benefit is 50% of the member’s final rate of salary during the preceding 12 months, plus an annuity based upon accumulated member contributions plus credited interest. If the member is over age 55, he or she will receive not less than the superannuation allowance to which he or she would have been entitled had they retired for superannuation.

NOTES TO FINANCIAL STATEMENTS (Continued)

ACCIDENTAL DISABILITY

Eligibility: Applies to members who become permanently and totally unable to perform the essential duties of the position as a result of a personal injury sustained or hazard undergone while in the performance of duties. There are no minimum age or service requirements.

Retirement Allowance: 72% of salary plus an annuity based on accumulated member contributions, with interest. This amount is not to exceed 100% of pay. For those who became members in service after January 1, 1988 or who have not been members in service continually since that date, the amount is limited to 75% of pay. There is an additional pension of \$846.12 per year (or \$312.00 per year in systems in which the local option contained in G.L. c. 32, s. 7(2)(a)(iii) has not been adopted), per child who is under 18 at the time of the member's retirement, with no age limitation if the child is mentally or physically incapacitated from earning. The additional pension may continue up to age 22 for any child who is a full time student at an accredited educational institution. For systems that have adopted Chapter 157 of the Acts of 2005, veterans as defined in G.L. c. 32, s. 1 receive an additional benefit of \$15 per year for each year of creditable service, up to a maximum of \$300.

ACCIDENTAL DEATH

Eligibility: Applies to members who die as a result of a work-related injury or if the member was retired for accidental disability and the death was the natural and proximate result of the injury or hazard undergone on account of which such member was retired.

Allowance: An immediate payment to a named beneficiary equal to the accumulated deductions at the time of death, plus a pension equal to 72% of current salary and payable to the surviving spouse, dependent children or the dependent parent, plus a supplement of \$846.12 per year, per child (or \$312.00 per year in systems in which the local option contained in G.L. c. 32, s. 9(2)(d)(ii) has not been adopted), payable to the spouse or legal guardian until all dependent children reach age 18 or 22 if a full time student, unless mentally or physically incapacitated.

The surviving spouse of a member of a police or fire department or any corrections officer who, under specific and limited circumstances detailed in the statute, suffers an accident and is killed or sustains injuries while in the performance of his duties that results in his death, may receive a pension equal to the maximum salary for the position held by the member upon his death. In addition, an eligible family member may receive a one-time payment of \$150,000.00 from the State Retirement Board. This lump sum payment is also available to the family of a public prosecutor in certain, limited circumstances.

NOTES TO FINANCIAL STATEMENTS (Continued)

DEATH AFTER ACCIDENTAL DISABILITY RETIREMENT

Effective November 7, 1996, Accidental Disability retirees were allowed to select Option C at retirement and provide a benefit for an eligible survivor. For Accidental Disability retirees prior to November 7, 1996, who could not select Option C, if the member's death is from a cause unrelated to the condition for which the member received accidental disability benefits, a surviving spouse will receive an annual allowance of \$6,000. For Systems that accept the provisions of Section 28 of Chapter 131 of the Acts of 2010, the amount of this benefit is \$9,000. For Systems that accept the provisions of Section 63 of Chapter 139 of the Acts of 2012, the amount of this benefit is \$12,000.

DEATH IN ACTIVE SERVICE

Allowance: An immediate allowance equal to that which would have been payable had the member retired and selected Option C on the day before his or her death. For a member who became a member prior to April 2, 2012 whose death occurred prior to the member's superannuation retirement age, the age 55 benefit rate is used. For a member classified in Group 1 who became a member on or after April 2, 2012 whose death occurred prior to the member's superannuation retirement age, the age 60 benefit rate is used. If the member died after age 60, the actual age is used. For a member classified in Group 2 or Group 4, whose death occurred prior to the member's minimum superannuation retirement age, the benefit shall be calculated using an age 55 age factor. The minimum annual allowance payable to the surviving spouse of a member in service who dies with at least two years of creditable service is \$3,000 unless the retirement system has accepted the local option increasing this minimum annual allowance to \$6,000, provided that the member and the spouse were married for at least one year and living together on the member's date of death.

The surviving spouse of such a member in service receives an additional allowance equal to the sum of \$1,440 per year for the first child and \$1,080 per year for each additional child until all dependent children reach age 18 or 22 if a full time student, unless mentally or physically incapacitated.

COST OF LIVING

If a system has accepted Chapter 17 of the Acts of 1997, and the Retirement Board votes to pay a cost of living increase (COLA) for that year, the percentage is determined based on the increase in the Consumer Price Index used for indexing Social Security benefits, but cannot exceed 3.0%. Section 51 of Chapter 127 of the Acts of 1999, if accepted, allows boards to grant COLA increases greater than that determined by CPI but not to exceed 3.0%. Only a certain portion of a retiree's total allowance is subject to a COLA. The total COLA for periods from 1981 through 1996 is paid for by the Commonwealth of Massachusetts.

Under the provisions of Chapter 32, Section 103(j) inserted by Section 19 of Chapter 188 of the Acts of 2010, systems may increase the maximum base on which the COLA is calculated in multiples of \$1,000. For many years the COLA base was calculated based upon the first \$12,000 of a retiree's allowance. Now the maximum base upon which the COLA is calculated varies from system to system. Each increase in the base must be accepted by a majority vote of the Retirement Board and approved by the legislative body.

NOTES TO FINANCIAL STATEMENTS (Continued)

METHODS OF PAYMENT

A member may elect to receive his or her retirement allowance in one of 3 forms of payment.

Option A: Total annual allowance, payable in monthly installments, commencing at retirement and terminating at the member's death.

Option B: A reduced annual allowance, payable in monthly installments, commencing at retirement and terminating at the death of the member, provided, however, that if the total amount of the annuity portion received by the member is less than the amount of his or her accumulated deductions, including interest, the difference or balance of his accumulated deductions will be paid in a lump sum to the retiree's beneficiary or beneficiaries of choice.

Option C: A reduced annual allowance, payable in monthly installments, commencing at retirement. At the death of the retired employee, 2/3 of the allowance is payable to the member's designated beneficiary (who may be the spouse, or former spouse who has not remarried, child, parent, sister, or brother of the employee) for the life of the beneficiary. For members who retired on or after January 12, 1988, if the beneficiary pre-deceases the retiree, the benefit payable increases (or "pops up" to Option A) based on the factor used to determine the Option C benefit at retirement. For members who retired prior to January 12, 1988, if the System has accepted Section 288 of Chapter 194 of the Acts of 1998 and the beneficiary pre-deceases the retiree, the benefit payable "pops up" to Option A in the same fashion. The Option C became available to accidental disability retirees on November 7, 1996.

ALLOCATION OF PENSION COSTS

If a member's total creditable service was partly earned by employment in more than one retirement system, the cost of the "pension portion" is allocated between the different systems pro rata based on the member's service within each retirement system. In certain circumstances, if a member received regular compensation concurrently from two or more systems on or after January 1, 2010, and was not vested in both systems as of January 1, 2010, such a pro-rata may not be undertaken. This is because such a person may receive a separate retirement allowance from each system.

NOTES TO FINANCIAL STATEMENTS (Continued)

NOTE 2 - SIGNIFICANT ACCOUNTING POLICIES

The accounting records of the System are maintained on a calendar year basis in accordance with the standards and procedures established by the Public Employee Retirement Administration Commission.

Cash accounts are considered to be funds on deposit with banks and are available upon demand.

Short Term Investments are highly liquid investments that will mature within twelve months from the date of acquisition.

Investments are reported at their fair value. Securities traded on recognized exchanges are valued at the most recent sales price at year end. If no sale was reported, the mean of the bid and asked price is used when available, or the most recent bid price. Mutual, commingled and pooled funds are valued based on the net asset or unit value at year end. Real estate and alternative investments are valued based on estimates provided by the managers of those respective investments. Purchases and sales of securities are reflected on the date the trade is initiated. Realized gain or loss is largely based on the difference between the cost or the value at the prior year end and the funds realized upon liquidation. Dividend income is generally recorded when received. Interest income is recorded as earned on an accrual basis. Income from alternative investments is recorded as reported by the managing partner. Appreciation or depreciation in the value of investments consists of the unrealized gains and losses reported as the difference between the previous period and the current value.

The system makes estimates and assumptions that affect the reported values of assets and liabilities and the reported amounts added and deducted during the reporting periods. The fair value of real estate and alternative investment holdings are generally estimated in the absence of reliable exchange values. The actual funds realized upon liquidation may differ from these estimates.

The provisions of Massachusetts General Laws Chapter 32, § 23(2) generally govern the investment practices of the system. The Board retains an investment consultant to closely monitor the implementation and performance of their investment strategy and advise them of the progress toward full funding of the system. That strategy seeks to balance the exposure to common deposit and investment risks related to custody, credit concentrations, interest rate and foreign currency fluctuations.

Operating expenses include the ordinary and necessary cost of investment and professional services and the other miscellaneous administrative expenses of the system.

NOTES TO FINANCIAL STATEMENTS (Continued)

The Annuity Savings Fund is the fund in which members' contributions are deposited. Voluntary contributions, re-deposits, and transfers to and from other systems, are also accounted for in this fund. Members' contributions to the fund earn interest at a rate determined by PERAC. Interest for some members who withdraw with less than ten years of service is transferred to the Pension Reserve Fund. Upon retirement, members' contributions and interest are transferred to the Annuity Reserve Fund. Dormant account balances must be transferred to the Pension Reserve Fund after a period of ten years of inactivity.

The Annuity Reserve Fund is the fund to which a member's account is transferred upon retirement from the Annuity Savings Fund and Special Military Service Credit Fund. The annuity portion of the retirement allowance is paid from this fund. Interest is credited monthly to this fund at the rate of 3% annually on the previous month's balance.

The Special Military Service Credit Fund contains contributions and interest for members while on a military leave for service in the Armed Forces who will receive creditable service for the period of that leave.

The Expense Fund contains amounts transferred from investment income for the purposes of administering the retirement system.

The Pension Fund contains the amounts appropriated by the governmental units as established by PERAC to pay the pension portion of each retirement allowance.

The Pension Reserve Fund contains amounts appropriated by the governmental units for the purposes of funding future retirement benefits. Any profit or loss realized on the sale or maturity of any investment or on the unrealized gain of a market valued investment as of the valuation date is credited to the Pension Reserve Fund. Additionally, any investment income in excess of the amount required to credit interest to the Annuity Savings Fund, Annuity Reserve Fund, and Special Military Service Credit Fund is credited to this Reserve account.

The Investment Income Account is credited with all income derived from interest and dividends of invested funds. At year-end the interest credited to the Annuity Savings Fund, Annuity Reserve Fund, Expense Fund, and Special Military Service Credit Fund is distributed from this account and the remaining balance is transferred to the Pension Reserve Fund.

NOTES TO FINANCIAL STATEMENTS (Continued)

NOTE 3 - SUPPLEMENTARY MEMBERSHIP REGULATIONS

The Medford Retirement System submitted the following supplementary membership regulations, which were approved by the Public Employee Retirement Administration Commission:

Creditable Service

March 17, 2014

Employees who work 20 or more hours per week in an eligible position shall be eligible for membership and shall have their creditable service prorated based on the number of hours worked as a part time employee.

July 5, 2005

Employees who work 20 hours per week or more shall be eligible for membership and shall have their creditable service prorated based on the number of hours worked as a part time employee.

July 22, 1988

School Physicians are allowed 1 year of creditable service for each 10 months of school year employment.

Permanent Part Time Elementary School Clerks are allowed one year of creditable service based on 5 days per week, 5 1/4 hours per day, 180 days per school year.

School Lunchroom Employees who work 6 hours per day, five days per week, 40 school weeks per year are allowed one year of creditable service. For each 1200 hours, (30 x 40) they are granted one year of creditable service.

Traffic Supervisors who work 3 hours per day, for five days per week, ten school months per year, are allowed one year of creditable service.

School Health Aides employed 15 hours per week, 180 days per school year, are granted one year of creditable service.

Miscellaneous

September 16, 2005

Elections for the two elected member positions on the Medford Retirement Board shall be run simultaneously, with all of those active and/or retired members who are eligible to seek an elected seat, acquire the appropriate signatures on nominations papers provided by the Board and submit said nomination papers to the Board within the established filing period shall have their names appear on one (1) ballot, which will then be distributed to those active and retired members who are eligible to vote in said election. The names on the ballot shall appear randomly, with the word "incumbent" next to any Board member who is seeking re-election. If there are more than two (2) candidates seeking election the Board, and the terms are uneven, then the candidate who receives the most votes shall be elected to the seat which carries the greater term, and the candidate who receives the second highest vote count shall be elected to the seat with the lesser term. In the

NOTES TO FINANCIAL STATEMENTS (Continued)

NOTE 3 - SUPPLEMENTARY MEMBERSHIP REGULATIONS (Continued)

event that a seat on the Board becomes vacant due to death or resignation, the Board shall run a special election as soon as practicable and the new elected member shall serve the remainder of the term of the vacated seat.

NOTES TO FINANCIAL STATEMENTS (Continued)

NOTE 4 - ADMINISTRATION OF THE SYSTEM

The System is administered by a five-person Board of Retirement consisting of the Finance Director/Auditor who shall be a member ex-officio, a second member appointed by the governing authority, a third and fourth member who shall be elected by the members in or retired from the service of such system, and a fifth member appointed by the other four board members.

Ex-officio Member: Aleesha Nunley Benjamin

Appointed Member:	Robert Maiocco	Term Expires:	1/23/2021
-------------------	----------------	---------------	-----------

Elected Member:	Rick Jordan, Chairman	Term Expires:	12/19/2020
-----------------	-----------------------	---------------	------------

Elected Member:	Patrick Ripley	Term Expires:	7/1/2020
-----------------	----------------	---------------	----------

Appointed Member:	James Viera	Term Expires:	1/27/2021
-------------------	-------------	---------------	-----------

The Board members are required to meet at least once a month. The Board must keep a record of all of its proceedings. The Board must annually submit to the appropriate authority an estimate of the expenses of administration and cost of operation of the system. The board must annually file a financial statement of condition for the system with the Executive Director of PERAC.

The investment of the system's funds is the responsibility of the Board. All retirement allowances must be approved by the Retirement Board. The PERAC Actuary performs verification prior to payment, unless the system has obtained a waiver for superannuation calculations allowing them to bypass this requirement. All expenses incurred by the System must be approved by a majority vote of the Board. Payments shall be made only upon vouchers signed by two persons designated by the Board.

Retirement board members and employees are bonded by an authorized agent representing a company licensed to do business in Massachusetts. Fidelity insurance is the only required policy coverage under Ch. 32 §21 and §23 as well as 840 CMR 17.01. The policy is designed to cover specific intentional acts such as theft, fraud or embezzlement and also specify who commits such acts, most commonly employees of the system. This coverage reimburses the system for the losses it suffers as a result of its employees' actions. It does not insure the employees for their illegal acts. Statutorily required coverage is provided by the current fidelity insurance policy to a limit of \$1,000,000 with a \$10,000 deductible issued through Travelers Casualty and Surety Company. The system also has Fiduciary coverage to a limit of \$50,000,000 under a blanket policy issued through the Massachusetts Association of Contributory Retirement Systems.

NOTES TO FINANCIAL STATEMENTS (Continued)

NOTE 5 - ACTUARIAL VALUATION AND ASSUMPTIONS

The most recent actuarial valuation of the System was prepared by Sherman Actuarial Services as of January 1, 2016.

The actuarial liability for active members was	\$120,803,090
The actuarial liability for retired and inactive members was	<u>145,944,073</u>
The total actuarial liability was	\$266,747,163
System assets as of that date were (actuarial value)	<u>179,451,376</u>
The unfunded actuarial liability was	<u><u>\$87,295,787</u></u>
 The ratio of system's assets to total actuarial liability was	 67.3%
As of that date the total covered employee payroll was	\$39,326,319

The normal cost for employees on that date was 8.6% of payroll

The normal cost (including administrative expenses) for the employer was 7.3% of payroll

The principal actuarial assumptions used in the valuation are as follows:

Investment Return: 7.50% per annum
 Rate of Salary Increase: 3.50% per annum

SCHEDULE OF FUNDING PROGRESS AS OF JANUARY 1, 2016

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Cov. Payroll ((b-a)/c)
1/1/2016	\$179,451,376	\$266,747,163	\$87,295,787	67.3%	\$39,326,319	222.0%
1/1/2014	\$163,680,899	\$268,527,648	\$104,846,749	61.0%	\$37,863,532	276.9%
1/1/2013	\$151,438,271	\$257,695,431	\$106,257,160	58.8%	\$35,211,907	301.8%
1/1/2010	\$150,489,230	\$233,827,870	\$83,338,640	64.4%	\$35,463,705	235.0%
1/1/2008	\$149,580,056	\$216,373,833	\$66,793,777	69.1%	\$34,011,464	196.4%

NOTES TO FINANCIAL STATEMENTS (Continued)

NOTE 6 - MEMBERSHIP EXHIBIT

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Retirement in Past Years										
Superannuation	10	6	12	14	18	22	18	13	20	20
Ordinary Disability	0	0	0	0	0	0	0	0	0	1
Accidental Disability	4	0	4	5	5	3	1	3	4	4
Total Retirements	14	6	16	19	23	25	19	16	24	25
Total Retirees, Beneficiaries and Survivors	663	629	603	602	632	636	625	615	608	616
Total Active Members	738	750	765	746	694	671	695	720	755	765
Pension Payments										
Superannuation	\$6,837,623	\$6,897,030	\$6,760,999	\$6,810,651	\$7,142,246	\$7,602,729	\$7,828,960	\$7,857,845	\$7,920,881	\$8,176,167
Survivor/Beneficiary Payments	553,296	590,899	613,061	651,380	695,862	760,987	753,177	801,333	805,779	845,833
Ordinary Disability	173,260	168,034	168,559	170,358	164,486	157,378	157,141	148,279	160,585	186,866
Accidental Disability	3,202,594	3,043,522	3,307,424	3,301,323	3,444,047	3,543,990	3,530,433	3,632,436	3,805,688	3,966,091
Other	1,308,644	1,273,496	1,191,718	1,384,273	1,442,762	1,505,224	1,605,257	1,644,416	1,710,004	1,742,881
Total Payments for Year	<u>\$12,075,417</u>	<u>\$11,972,981</u>	<u>\$12,041,761</u>	<u>\$12,317,985</u>	<u>\$12,889,403</u>	<u>\$13,570,308</u>	<u>\$13,874,968</u>	<u>\$14,084,309</u>	<u>\$14,402,937</u>	<u>\$14,917,838</u>

PERAC

Five Middlesex Avenue | Suite 304

Somerville, MA | 02145

Ph: 617.666.4446 | Fax: 617.628.4002

TTY: 617.591.8917 | Web: www.mass.gov/perac